

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 7,193,222 B2  
APPLICATION NO. : 10/518660  
DATED : March 20, 2007  
INVENTOR(S) : Jacka et al.

Page 1 of 2

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 1:

Line 21, after "specimens" insert --do--.

Line 22, change ",", to --;--.

Column 2, line 52, after "collection." insert the following paragraphs:

-- Witold Slowko described in his article in International Symposium "Ion Implantation and other Applications of Ions and Electrons - Ion 2000" a secondary electron detector with a micro-porous plate for environmental scanning electron microscope (SEM), in which he used a micro-porous plate as a diaphragm having a high resistance to a transmission of gas and low resistance to a transmission of electrons. A micro-porous plate could have been a micro channel plate or a micro sphere plates. Micro channels are channels with a diameter approximately 0,01 mm and length 0,5 to 1 mm, what gives the diameter to length ratio 1 : 50 to 1 : 100.

The disadvantage of such micro channels is above all their very low life expectancy in an environmental SEM, as the micro channels are typically within a few hours so contaminated that they are useless for the purpose for which they were intended in an environmental SEM. Another disadvantage is that they put through a big portion of the backscattered electrons, what has a deteriorating effect on a resolving power of the SEM.--

Column 3, line 4, after "connected." insert the following paragraph:

-- The low resistance to a transmission of electrons is achieved by electron microlenses inside and in front of each orifice in said diaphragm. Electron microlenses are created by an electrical field protruding through the orifices in said diaphragm. This electrical field originates from a conductive coating inside of the detector chamber that is connected to a voltage source.--

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 6, line 66, after "diaphragm" delete "being".

Signed and Sealed this

Nineteenth Day of June, 2007

A handwritten signature in black ink, appearing to read "Jon W. Dudas". The signature is stylized with a large, looping initial "J" and a distinct "D".

JON W. DUDAS  
*Director of the United States Patent and Trademark Office*